

Abstract

The present invention relates to a method and system for efficiently identifying errant  
5 processes in a computer system using an operating system (OS) error recovery method that  
identifies if the error caused by the errant process can be recovered and, if so, can recover from  
the error. The method and system of the present invention operates after standard Error  
Correcting Code (ECC) and parity check bit methods and systems are unsuccessful in recovering  
from the error. In accordance with an embodiment of the present invention, the method and  
10 system includes detecting an error during instruction execution, storing a physical address of an  
errant process that caused the error, and storing an execution instruction pointer (IP) in an  
interruption instruction pointer (IIP). The method further includes determining a first virtual  
address from an operating system mapping table, determining a second virtual address from a  
translation look-aside buffer, and identifying the errant process, if the physical address and the  
15 second virtual address match the physical address and the first virtual address.